

**STATE OF CALIFORNIA
ENERGY RESOURCES CONSERVATION
AND DEVELOPMENT COMMISSION**

In the Matter of:)	Docket No. 99-DIST-GEN-(2)
)	
Exploring Revisions to Current Interconnection)	
Rules Between Investor-owned and)	
Publicly-owned Utility Distribution Companies)	
And Distributed Generators)	
)	
Evaluating CEQA Procedures for Siting)	
Distributed Generation Facilities)	

**COMMENTS OF PACIFIC GAS AND ELECTRIC
COMPANY ON
SITING COMMITTEE WORKSHOP PROPOSAL
TO DEVELOP A STRATEGIC PLAN
FOR DISTRIBUTED GENERATION**

On January 16, 2002, this Committee issued a workshop report asking whether the California Energy Commission should consider developing a “Strategic Plan” for Distributed Generation. The report requested comments on a variety of questions by January 28th, and scheduled a workshop to be held on February 5th. Pacific Gas and Electric Company (PG&E) welcomes this opportunity to discuss issues concerning distributed generation (DG) with the Commission and interested parties, and has advised the Commission that David Rubin, PG&E’s Director of Service Analysis, would be available to appear at the workshop on February 5th if the Commission so desires. Mr. Rubin has had extensive experience discussing DG policy issues with industry participants, and has testified on these issues for PG&E. PG&E also looks forward to addressing the comments and suggestions of other parties on the strategic vision of this Commission concerning distributed generation.

1. Various State Agencies Have Long Been Exploring DG Policy Issues.

The workshop notice proposes to use the development of a strategic plan as a basis for the state setting policy towards distributed generation. However, this Commission and the California Public Utilities Commission have been considering issues connected with Distributed Generation for some time now. In late 1998, the CPUC began a Rulemaking on Distributed Generation and Competition in Electric Distribution Service, R.98-12-015. Numerous parties, including the CEC filed extensive comments with the CPUC on the many topics listed in that rulemaking, many of which are identical to those raised in this workshop notice. That proceeding included several days of full panel hearings before representatives of the CPUC and two Commissioners from the CEC, along with the Executive Director of the Electric Oversight Board. (EOB), A CPUC draft decision was the subject of extensive comments, and in late 1999, the CPUC issued D.99-10-065, addressing a variety of DG and distribution competition issues.

The CEC and the EOB conducted their own DG proceedings at the same time. The CEC docket number was 99-DIST-GEN(1) and was entitled “Information Docket on Distributed Generation and Competition in Electric Distribution Service.” The EOB docket number was 99-A-1-DG, and was entitled “Administrative Docket on Distributed Generation.”

Further proceedings followed. The CPUC launched a new rulemaking focused on Distributed Generation, R.99-10-025, in October 1999. That rulemaking asked many of the exact same questions raised in the notice announcing the CEC workshop on February 5th. To answer these questions, the CPUC first received numerous comments, and then held formal hearings in two separate phases. Phase One of that case was the subject of two weeks of hearings in May and June 2000. Phase Two was the subject of an additional two weeks of

hearings held in September 2000. Extensive briefing occurred throughout that year on the many policy issues raised in the rulemaking. That briefing was concluded in December 2000.

The CPUC has ruled on one portion of the issues presented in those hearings. On July, 12, 2001, it issued D.01-07-027, addressing the policies to be used in setting standby rates for distributed generation, and directing the utilities to file applications for approval of standby rates in accordance with the policies set forth in that decision. The three investor owned electric utilities then filed applications in accordance with that decision in September, 2001, and the CPUC has not yet scheduled a prehearing conference or set a schedule for those rate cases. Nor has the CPUC indicated when it plans to address the many other issues presented in the DG OIR.

Nonetheless, throughout the year 2001, there were many other developments affecting and encouraging distributed generation. In May, 2001, the legislature adopted SB 1X 28, which exempted many new distribution level generators coming on line between May 2001 and June 2003 from paying standby charges for five to ten years. (See Public Utilities Code sections 353.1 through 353.13). The net metering statute, (Public Utilities Code section 2728) was amended to allow solar and wind projects up to one MW in size to qualify for the subsidies provided by net metering, which effectively allows such customers to avoid paying for much or all of the distribution facilities used to serve them.

In the Standby Policy decision, the CPUC adopted a proposed “Independent Clean Energy Tariff” or “ICE-T,” which exempted solar projects from paying standby charges and most interconnection charges. In addition, on March 27, 2001, the CPUC issued D.01-03-073, which directed the gas and electric utilities regulated by the CPUC to spend up to \$125 million per year to subsidize the cost of certain new DG projects, including paying for up to half the costs of certain projects. The availability of and amount of the incentives vary depending on the

technology involved. The CPUC has issued a number of decisions concerning the structure of this self-generation incentive program.

The state legislature also provided new tax credits to the developers of DG. SB 17XX, which was signed by the governor in October 2001, added a new section 17053.84 to the Revenue and Taxation Code. The tax credit, for tax years 2001-2003, is equal to the lesser of 15 percent of the purchase cost or \$4.50 per rated watt of a photovoltaic or wind-driven system with a generating capacity of not more than 200 kilowatts. The credit would be reduced to half that amount for tax years 2004-2005, and would sunset on January 1, 2006. Similarly, in October 2001, the governor signed SBXX 82, which added Government Code section 14684. That section requires that state agencies, “in consultation with the State Energy Resources Conservation and Development Commission, shall ensure that solar energy equipment is installed, no later than January 1, 2007, on all state buildings and state parking facilities, where feasible.”

The CEC has also been active. As part of that effort, standardized interconnection rules have been adopted, with very extensive energy devoted to clarifying and improving those interconnection rules. The CEC also has an extensive set of funding programs for DG, in which it provides millions of dollars of funding to DG developers. The CEC has also issued reports exploring whether there are opportunities to assist local governments in streamlining permitting requirements.

2. The CEC Should Not Issue A Vision Statement At Odds With Or Which Prejudges Issues Now Pending Before Other State Agencies.

The workshop notice asks about the possibility of this Commission using a “vision statement” or strategic planning document as a tool to set state policy concerning DG. Some of those policies are already clear. There is no doubt that DG can be useful to customers as one choice for meeting their energy needs. In addition, there is also no doubt that DG can contribute

in some amount to meeting the overall energy needs of the state. Further, one key DG technology, photovoltaic energy, does not burn fossil fuels, and does not create air pollution.

However, other policy choices are less clear. Indeed, the basic thrust of many of the possible “vision statements” listed in the notice—that distributed generation should be favored over other energy supply alternatives—potentially embraces a set of technologies that can have higher costs, higher pollution, and lower efficiency than central station plants. Nor is there any clear mandate for choosing DG over energy efficiency measures in meeting the state’s energy needs. Thus, it is important that the Commission not issue any sweeping statement that DG should be preferred over other central station plants or energy efficiency, particularly since those tools remain the primary means of meeting this state’s energy needs.

In addition, it is also important for this Commission to avoid prejudging any issue pending before other agencies. For example, several rate issues are before the CPUC in the DG standby rate cases, and a variety of policy issues are pending before the CPUC in the DG OIR, including ones mentioned in the notice, such as whether regulated utilities may own DG and when DG can be a useful substitute for distribution wires. The development of a policy statement by this Commission should not be a vehicle for redebating issues already pending elsewhere.

3. The CEC Should Not Adopt A Goal That 20 Percent Of New Electricity Capacity Additions Come From Distributed Generation.

The notice asks whether the CEC should adopt as part of its strategic plan an element stating that a particular percentage (20%) of new electricity capacity additions should come from distributed generation. The Commission should not adopt any such figure as a target, precisely because DG can be less efficient and more polluting than central station plants. If such technology remains more expensive and frequently more damaging to the environment than central station plants, then their share of the new capacity marketplace is likely to decrease. On

the other hand, if breakthroughs in technology occur, then their market share should increase. What will happen by way of product improvements over the next 5 to 20 years is the subject of a great deal of uncertainty. In the last decade, there were many who predicted that breakthroughs in microturbines, fuel cells, and photovoltaic technology, were just around the corner. Those predictions were at least partially correct since improvements in these technologies have indeed occurred. However, the extent to which further improvements will occur, and what impact they will have on price and market penetration, are topics about which many people have very different expectations. The extent of market to be captured by DG should be the result of fair competition in that marketplace, rather than one set by a “strategic plan.” A future market share target should not be included in the CEC’s official documents.

4. Distribution Microgrids Can Create A Variety Of Safety, Reliability, and Regulatory Issues.

The Notice asks whether “the microgrid concept [should] be endorsed as a matter of public policy.” This topic was the subject of extensive discussion in distributed generation and distribution competition rulemaking conducted by the CPUC. In that proceeding, and in other forums, various proponents have argued for the right to own and operate extensive private distribution systems free of any regulatory oversight, in place of utility distribution systems. They have argued, just as generators did at the time, that a private marketplace free of regulatory oversight was certain to achieve customer savings over utility service. However, as the generation marketplace has clearly demonstrated, unregulated suppliers do not necessarily supply products at lower prices. The CPUC concluded that such private distribution systems can raise a variety of safety, reliability, and regulatory issues, and that creating distribution competition can adversely impact the costs of other customers. Decision 99-10-025.

Trailer parks offer an instructive example on the safety and reliability issue. State law for many years permitted trailer park owners to own and operate the distribution systems within

those parks, and provided for a discount from ordinary utility rates to the owners of those parks. Some trailer park owners running distribution systems did a fine job. However, others did not, creating a variety of safety, reliability, and in some cases, rate issues which the CPUC has had to struggle with in multiple dockets. The concept of private microgrids serving multiple customers is not one that should be embraced by this Commission as a matter of policy, particularly when rate, reliability, safety, and regulatory issues associated with such service have not been addressed, and are beyond the jurisdiction of this Commission.

5. This Commission Should Consider Undertaking An Additional Job Beyond The Many DG Activities It Now Handles, Which Is Analyzing With The CPUC What Level Of Subsidies Should Be Provided To DG.

In 2001, when many of the current major subsidies for DG were adopted, it was clear that the state was facing an electric supply crisis, with rolling blackouts threatened day after day. In response to this crisis, the state provided a variety of new subsidies, including an additional \$125 million per year in payments to the developers of DG over and above the incentives already provided by this Commission. Even at the time, it was not clear that this was the appropriate level of subsidy. In particular, in early 2001, when the CPUC's Energy Division proposed the self-generation incentives later adopted by the CPUC, this agency filed comments raising two excellent questions. The first was whether this level of expenditures was cost effective. Those comments, filed on February 13, 2001, included an appendix, written by Carl Blumstein, which stated:

A recent report (the Report) by the staff of the California Public Utilities Commission (CPUC) contains an analysis of the costs and benefits of distributed generation. Among other things, this analysis concludes that subsidies for distributed generation will produce very attractive returns. The Report proposes a program of subsidies that the Report estimates will have a benefit/cost ratio of about ten.

However, an examination of the Report's analysis shows that this very favorable benefit/cost ratio is based on some assumptions that are, at best, problematic. The biases introduced by these problematic assumptions are

likely to be very large-in fact, so large that it seems probable the benefit/cost ratio is actually less than one. (CEC comments filed in CPUC Rulemaking 98-07-037, page 34) (emphasis added).

The report also raised questions about how such subsidies should be administered. In particular, it stated:

The CPUC's stated desire of not wanting to delay consumer access to subsidies for self-generation is understandable, but seems best met by working, where applicable, with the CEC's Buydown Program. It does not make sense for each of the utilities to establish entirely separate programs, particularly when there will be substantial overlap with the CEC's Buydown Program. The inherent duplication and likely differences between basic rules among programs will confuse consumers and frustrate the program delivery infrastructure. The existing CEC Buydown Program is in place, ongoing, and developed with flexible guidelines that can quickly respond to market conditions, and so should be considered as an appropriate delivery mechanism for the CPUC's goal of quickly enhancing the installation of more DG. (CEC comments, page 29).

The CPUC did not follow either suggestion, or allow hearings on cost effectiveness, but instead simply adopted its staff proposal, notwithstanding a statutory duty to coordinate with this agency on such programs. However, the questions asked by the CEC are even more in need of being addressed now than they were in early 2001. The energy prices in the market place are much lower now than they were in the report that was the basis for the CPUC program. In addition, there is much less need for new supply now than there was in 2001. The most recent supply report by this Commission, dated December 19, 2001, concluded that supply challenges still remain, but made clear that the supply forecast is much better now than it was in early 2001. The industry also has additional experience with these programs, including the fact that many PV vendors significantly increased their prices in response to the high funding levels provided by the CPUC's program.

It is time for the CEC and the CPUC together to examine what level of subsidies is appropriate to meet the state's energy needs. The combination of tax credits, exemptions from

standby and other charges, as well as hundreds of millions of dollars of direct subsidies, may be too low or too high, but no state agency has taken a look at that cost effectiveness analysis. If more or less should be spent, then rates and charges could be adjusted, so that the amounts charged to other customers and taxpayers to provide these DG subsidies is set at the appropriate level. As part of this review, the CEC and CPUC should consider the appropriate levels of DG subsidies given there are non-DG alternatives (central station generation, energy efficiency programs) that DG is competing with to solve supply shortages.

6. Conclusion.

PG&E appreciates the opportunity to discuss these interesting issues with the Commission, and looks forward to the workshop on February 5th.

Dated: January 28, 2002.

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